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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/784,140	02/16/2001	Takuji Tanimura	04791/0134	2146
22428	7590	04/05/2005	EXAMINER	
FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			KADING, JOSHUA A	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/784,140

Applicant(s)

TANIMURA, TAKUJI

Examiner

Joshua Kading

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-21 is/are rejected.
- 7) ☒ Claim(s) 3, 4, and 7-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 3, 4, and 7-12 are objected to because of the following informalities:

Claim 3, line 3; claim 4, line 3; and claims 7-12 on line 4 of each claim states,

5 "upon call". This should be changed to --upon a call--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

10 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5, 6, 11, 12, 15, and 18 are rejected under 35 U.S.C. 112, second
paragraph, as being indefinite for failing to particularly point out and distinctly claim the
15 subject matter which applicant regards as the invention.

Regarding claim 5 (and dependent claims 11 and 15) and claim 6 (and
dependent claims 12 and 18), applicant discloses, "the one of the LAN type telephone
sets" on line 5. However, it is not clear which telephone set applicant is referring to. Line
2 of claim 5, line 3 of claim 3 (from which claim 5 depends), line 2 of claim 6, and line 3
20 of claim 4 (from which claim 6 depends) each disclose a "one of the LAN type telephone
sets". Therefore, claims 5, 6, 11, 12, 15, and 18 are left vague and indefinite.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

5 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12 and 14-21 are rejected under 35 U.S.C. 103(a) as being
10 unpatentable over U.S. Patent 6,252,952 B1, Kung et al. (Kung) in view of U.S. Patent 6,754,224 B1, Murphy and in further view of U.S. Patent 6,069,890, White et al. (White).

Regarding claims 1 and 2, Kung discloses, "a hybrid type telephony system capable of establishing a connection between conventional type telephone sets
15 contained in an exchange unit...the system comprising:

a gateway circuit connected between the exchange unit and the IP network
(figure 1, the gateway block in element 120 is connected between the IP network 120 (which uses switches and routers to transport data) and the exchange 160),

a central control unit connected to the LAN of the IP network *(figure 1, element*
20 *200 and figure 2 shows a detailed schematic of the control unit 200) for establishing a communication path to the exchange unit via a control bus (col. 26, lines 65-col. 9, lines 1-12), controlling switching of IP packets of the IP network (figure 2, element 210), managing IP address information of the LAN type telephone sets and the gateway circuit via the LAN (figure 2, element 214 where it is known in the art that KNS servers*
25 *manage and store the IP address (and other address) information for call management), and controlling connection between the LAN type telephone sets and connection*

between the LAN type telephone sets and the gateway circuit (*figure 2, element 218 which is fully explained for call setup and management in col. 25, lines 58-col. 28, lines 1-9*),

wherein the control bus forms a communications path for enabling the central
5 control unit to control a... switch for the conventional type telephone sets and an IP switch for the LAN type telephone sets (*figure 2, element 210 where the gigabit switch is used to switch all information coming from all telephone sets, conventional and IP*)."

However, Kung lacks what Murphy discloses, "...LAN type telephone sets contained in an IP network (*figure 2, element 22 where although only one is shown, one
10 of ordinary skill knows that networks do not exist only to serve one use, therefore more than one telephone set is reasonable assumed*)..." Kung and Murphy further lack what White discloses, "a gateway circuit...performing voice data format conversion (*figure 7, element 208 is a voice recognition card which is known to receive analog voice signals and convert them into a digital format for further processing and transmission, it is note
15 that element 104 is the gateway pictured in figure 4*)..." and the switch for the conventional telephone sets is "a time-division switch (*figure 9, element 410 as read in col. 12, lines 5-8*)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the IP telephones and the voice format conversion with the rest of
20 the systems of claims 1 and 2 for the purpose of communicating using a traditional voice phone and IP voice phone (*White, col. 11, lines 34-40*). The motivation for this is

an IP based telephone system can accommodate more users (and thus more calls) because it is a connectionless oriented system.

Regarding claims 3 and 4, Kung, Murphy, and White disclose the systems of
5 claims 1 and 2. However, Murphy and White lack what Kung further discloses, "the LAN
type telephone sets (*figure 1, elements 22*) have IP address information of the central
control unit (*col. 25, lines 58-62 where the gateway (not the residential gateway, but the
gateway as described in claims 1 and 2) used in the IP network is directly connected to
the control unit and the IP telephones and thus must have the IP address of the control
10 unit so that it may send/receive data*), upon a call to one of the LAN type telephone sets
from another of the LAN type telephone sets, the another of the LAN type telephone
sets transmits a call requesting packet to the central control unit via the LAN according
to the IP address information of the central control unit (*col. 28, lines 42-50 where the
dialed digits represent a call request and as seen in lines 10-12, this is a call between
15 two LAN type telephone sets*), inquires the central control unit about a destination IP
address, and fetches the destination IP address to establish communication (*col. 26,
lines 29-35 where the routing number is the destination IP address*)." It would have
been obvious to one with ordinary skill in the art at the time of invention to include the
call request and the retrieving of IP address information with the systems of claims 1
20 and 2 for the same reasons and motivation as in claims 1 and 2.

It will be assumed that “the one of the LAN type telephone sets” refers to the LAN type telephone initially referred to in claims 5 and 6.

Regarding claims 5 and 6, Kung, Murphy, and White disclose the systems of claims 3 and 4. However, White lacks what Kung and Murphy further disclose, “upon
5 connection between one of the LAN type telephone sets (*figure 1, elements 22*) and one of the conventional type telephone sets, the central control unit reports the IP address of the gateway circuit to the LAN type telephone set (*col. 25, lines 58-61 where the LAN type telephone (IP telephone) must have known the gateway circuit IP address in order to access the control unit because, as seen in figure 1, the control unit is only*
10 *accessible through the IP network gateway*) and the IP address of the one of the LAN type telephone sets to the gateway circuit (*col. 26, lines 41-45 whereby issuing a call proceeding message to the IP telephone, so as to establish a communication path between the conventional telephone set and the gateway circuit (where the IP telephone is accessed through the residential gateway) means the control unit was*
15 *informed of the IP telephones IP address*).” It would have been obvious to one with ordinary skill in the art at the time of invention to include the IP address notification with the systems of claims 3 and 4 for the same reasons and motivation as in claims 3 and 4.

20 Regarding claims 7-12, Kung, Murphy, and White disclose the systems of claims 1 and 2, 3 and 4, and 5 and 6. However, Kung and White lack what Murphy further discloses, “the central control unit assigns a single extension representation telephone

number for the plurality of conventional type telephone sets and the plurality of LAN type telephone sets as a single group and, upon a call from one of the conventional telephone sets or the LAN type telephone sets using the extension representation telephone number, performs a call-incoming processing to all the telephone sets in the group (*col. 7, lines 1-18 where there can be an incoming multicast call, thus implying a single extension/number used to address the multicast group, directed to the conventional sets and the LAN sets*).” It would have been obvious to one with ordinary skill in the art at the time of invention to include the prefix dialing with the systems of claims 1-6 for the same reasons and motivation as in claims 1-6.

Regarding claim 14, Kung, Murphy, and White disclose the system of claim 3. However, Murphy and White lack what Kung further discloses, “wherein the IP address of the central control unit is set in each of the LAN type telephone sets in advance of any call initiated by any of the LAN type telephone sets (*col. 25, lines 58-62 where it is strongly implied that each set has the central control units IP address, if this were not the case, then how would the sets place/receive calls?*).” It would have been obvious to one of ordinary skill in the art at the time of invention to include the IP address of the central control unit in each LAN telephone set for the same reasons and motivation as in claim 3.

Regarding claims 15 and 18, Kung, Murphy, and White disclose the systems of claims 5 and 6. However, Murphy lacks what Kung and White disclose, “the

time-division switch provided in the exchange unit for providing time-division data transfer among the conventional type telephone sets (*White, figure 9, element 410*), wherein the central control unit controls the time-division switch by way of the control bus, to allow data to be sent to the one of the conventional type telephone sets via the gateway unit and the time-division switch along the communication path established between the one of the conventional type telephone sets and the gateway circuit (*Kung, col. 6, lines 36-40 that is to say, the central station is used to control the conventional sets and LAN sets*).” It would have been obvious to one of ordinary skill in the art at the time of invention to include the time-division provided in the exchange and the central control unit controlling the LAN telephone sets and conventional telephone sets for the same reasons and motivation as in claims 5 and 6.

Regarding claims 16 and 19, Kung, Murphy, and White disclose the systems of claims 1 and 2. However, Murphy and White lack what Kung discloses, “wherein the central control unit controls establishment of connections for all calls made between any two of the LAN type telephone sets, between any two of the conventional type telephone sets, and between any one of the LAN type telephone sets and any one of the conventional type telephone sets (*col. 6, lines 36-40 whereby controlling the integration of IP with PSTN, it controls the various connects between the two networks*).” It would have been obvious to one of ordinary skill in the art at the time of invention to include the central control unit controlling the establishment of connections

between LAN telephone sets and conventional telephone sets for the same reasons and motivation as in claims 1 and 2.

Regarding claims 17 and 20, Kung, Murphy, and White disclose the systems of
5 claims 1 and 2. However, Murphy and White lack what Kung further discloses, "a maintenance and management terminal that is communicatively connected to the central control unit via the control bus (*figure 2, element 216*), wherein the maintenance and management terminal is configured to perform maintenance and management for the hybrid telephony system, so that the central control unit can set control data and
10 monitor control (*col. 8, lines 15-21*)."

It would have been obvious to one of ordinary skill in the art at the time of invention to include the maintenance and management terminal configured to perform the corresponding functions for the same reasons and motivation as in claims 1 and 2.

15 Regarding claim 21, Kung discloses, "a hybrid telephony system comprising:
a...switch in which conventional type telephone sets are connected (*figure 2, element 210*); an IP switch...(*figure 2, element 210*); a gateway circuit...to connect the conventional type telephone sets and...to connect the LAN type telephone sets (*figure 1, the gateway block in element 120 is connected between the IP network 120 (which*
20 *uses switches and routers to transport data) and the exchange 160*); a LAN which connects the gateway circuit and the IP switch (*figure 2 shows several networks connected together to form a sort of LAN in which the gateway circuit and IP switch are*

connected); a control bus which connects the... switch, the IP switch, and the gateway circuit (*figure 2, element 210 where the gigabit switch is used to switch all information coming from all telephone sets, conventional and IP*); and a central control unit connected to the LAN of the IP network (*figure 1, element 200 and figure 2 shows a*
5 *detailed schematic of the control unit 200*) for establishing a communication path to the exchange unit via a control bus (*col. 26, lines 65-col. 9, lines 1-12*), controlling switching of IP packets of the IP network (*figure 2, element 210*), managing IP address information of the LAN type telephone sets and the gateway circuit via the LAN (*figure 2, element 214 where it is known in the art that KNS servers manage and store the IP*
10 *address (and other address) information for call management*), and controlling connection between the LAN type telephone sets and connection between the LAN type telephone sets and the gateway circuit (*figure 2, element 218 which is fully explained for call setup and management in col. 25, lines 58-col. 28, lines 1-9*)."

However, Kung lacks what Murphy discloses, "...LAN type telephone sets
15 contained in an IP network (*figure 2, element 22 where although only one is shown, one of ordinary skill knows that networks do not exist only to serve one use, therefore more than one telephone set is reasonable assumed*)..." Kung and Murphy further lack what White discloses, the gateway circuit "performing voice data format conversion (*figure 7, element 208 is a voice recognition card which is known to receive analog voice signals*
20 *and convert them into a digital format for further processing and transmission, it is note that element 104 is the gateway pictured in figure 4*)," and the switch for the

conventional telephone sets is "a time-division switch (*figure 9, element 410 as read in col. 12, lines 5-8*)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the IP telephones and the voice format conversion with the rest of the systems of claims 1 and 2 for the purpose of communicating using a traditional voice phone and IP voice phone (*White, col. 11, lines 34-40*). The motivation for this is an IP based telephone system can accommodate more users (and thus more calls) because it is a connectionless oriented system.

10

Response to Arguments

Applicant's arguments, see REMARKS, page 13, *Drawing Objection*, filed 30 September 2004, with respect to the objection to the drawings have been fully considered and are persuasive. The objection of the drawings has been withdrawn.

15

Applicant's arguments, see REMARKS, page 14, *Claim Objection*, filed 30 September 2004, with respect to the objection to claim 13 have been fully considered and are persuasive. The objection of claim 13 has been withdrawn.

20

Applicant's arguments, see REMARKS, page 14, *Claim Rejection Under 35 U.S.C. 112, first paragraph*, filed 30 September 2004, with respect to the 35 U.S.C. 112, first paragraph rejection to claim 13 have been fully considered and are persuasive. The 35 U.S.C. 112, first paragraph rejection of claim 13 has been withdrawn.

Applicant's arguments, see REMARKS, page 14, *Claim Rejection Under 35 U.S.C. 112, second paragraph*, filed 30 September 2004, with respect to the 35 U.S.C. 112, second paragraph rejection to claims 3, 4, and 13 have been fully considered and are persuasive. The 35 U.S.C. 112, second paragraph rejection of claims 3, 4, and 13 have been withdrawn.

Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments, see REMARKS, pages 15-16, filed 30 September 2004, with respect to the rejection(s) of claim(s) 5-12 under 35 U.S.C. 103 Kung in view of Nelson in further view of White have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (571) 272-3070. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

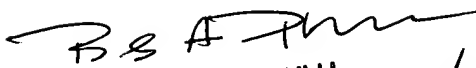
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Joshua Kading
Examiner
Art Unit 2661

April 1, 2005



BOB PHUNKULH
PRIMARY EXAMINER 4/4/05